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| APPLICATION NO.            | FILING DATE                         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|----------------------------|-------------------------------------|----------------------|-------------------------|------------------|
| 10/743,566                 | 12/19/2003                          | Silvia Marini        | SCP-117                 | 5050             |
| 42419                      | 7590 04/10/2006                     | EXAMINER             |                         |                  |
| PAULEY PETERSEN & ERICKSON |                                     |                      | COLE, ELIZABETH M       |                  |
| SUITE 365                  | 2800 WEST HIGGINS ROAD<br>SUITE 365 |                      |                         | PAPER NUMBER     |
| HOFFMAN ESTATES, IL 60195  |                                     |                      | 1771                    |                  |
|                            |                                     |                      | DATE MAILED: 04/10/2006 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| •  |  |   |  |  |  |  |
|--|--|---|--|--|--|--|
|  | Application No.  | Applicant(s)  |  |  |  |  |
|  | 10/743,566   | MARINI ET AL.   |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |  |
|  | Elizabeth M. Cole  | 1771  |  |  |  |  |
| The MAILING DATE of this communication ap<br>Period for Reply  | pears on the cover sheet with the  | correspondence address  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING C  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be to the second will expire SIX (6) MONTHS from the cause the application to become ABANDON | N. imely filed  n the mailing date of this communication. ED (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |   |  |  |  |  |
| 1) Responsive to communication(s) filed on   | ·  |   |  |  |  |  |
| 2a) ☐ This action is FINAL. 2b) ☐ This   | This action is FINAL. 2b) This action is non-final.  |   |  |  |  |  |
|  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |  |  |  |  |
| closed in accordance with the practice under   | Ex parte Quayle, 1935 C.D. 11, 4   | 153 O.G. 213.   |  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |  |
| 4) Claim(s) 1-17 is/are pending in the application   | ١.   |   |  |  |  |  |
| 4a) Of the above claim(s) 12-17 is/are withdrawn from consideration.   |  |   |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |   |  |  |  |  |
| 6)⊠ Claim(s) <u>1-11</u> is/are rejected.  |  |   |  |  |  |  |
| 7) Claim(s) is/are objected to.  | l  |   |  |  |  |  |
| 8) Claim(s) are subject to restriction and/o   | or election requirement.   |   |  |  |  |  |
| Application Papers   |  |   |  |  |  |  |
| 9)☐ The specification is objected to by the Examine  | er.  | ·   |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |  |   |  |  |  |  |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |   |  |  |  |  |
| 11) I he oath or declaration is objected to by the E   | xaminer. Note the attached Office  | e Action of form PTO-152.   |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |  |
| 12) ☐ Acknowledgment is made of a claim for foreign<br>a) ☐ All b) ☐ Some * c) ☐ None of:  |  | a)-(d) or (f).  |  |  |  |  |
| 1. Certified copies of the priority documen  |  | r. Al.  |  |  |  |  |
| 2. Certified copies of the priority documen  |  |   |  |  |  |  |
| 3. Copies of the certified copies of the price   | · ·  | ved in this National Stage  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  |  |   |  |  |  |  |
|  |  | •   |  |  |  |  |
|  |  |   |  |  |  |  |
| Attachment(s)  |  |   |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summar  | y (PTO-413)   |  |  |  |  |
| <ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08</li> </ol>   | Paper No(s)/Mail D   | Date<br>Patent Application (PTO-152)  |  |  |  |  |
| Paper No(s)/Mail Date  | 6) Other:  |   |  |  |  |  |
| Potent and Trademark Office  |  |   |  |  |  |  |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belluci et al, U.S. Patent Application Publication 2003/0252254 in view of Higuchi et al, U.S. Patent No. 4,525,169. Belluci discloses a durable textile material comprising a needled nonwoven fabric comprising microfibers impregnated with a polyurethane binder which comprises both hard and soft segments, wherein the soft segments comprise a mixture or polycarbonate polyols and polyester polyols and the hard segments comprise urethane groups derived from the reaction of isocyanate with ureic polyols. See paragraphs 0019- 0020. Suitable polycarbonate diols and polyester polyols include those claimed. See paragraph 0021. The free isocyanate groups may comprise the claimed groups. See paragraph 0023. The polycarbonate diol and polyester diol can be present in a ratio of 82/20 to 40/60. See paragraph 0029. The materials are suitable for use in making artificial leather. Belluci differs from the claimed invention because Belluci does not disclose employing fibers having different degrees of Higuchi et al teaches an artificial leather material comprising ultra fine fibers having a denier of between 0.0001 and 0.7. The fibers can be needled to form a fabric. See col. 3, lines 6-9. Higuchi et al teaches employing two different types of fibers having two different degrees of dyeability to make up the nonwoven. See col. 3,

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lines 23-38. Higuchi teaches that by using two different fibers having different dyeability that a mixed color effect can be obtained. Higuchi further teaches that the fabric can further be printed with various dyes and pigments to further enhance the appearance of the fabric. See col. 6, lines 19-46. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed fibers having different degrees of dyeability to form the fabric substrate in Belluci and to have further printed the dyed fabric, motivated by the teaching of Higuchi that this allows for the formation of fabrics having an enhanced appearance. With regard to the limitations regarding when the fibers are dyed and the type of needles employed, since the instant claims are drawn to a product, the burden is on Applicant to show that any process differences result in an unobvious difference in the claimed product.

3. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizoguchi et al, U.S. Patent No. 5,798,165 in view of Traubel et al, U.S. Patent No. 3,920,588 and Higuchi et al, U.S. Patent No. 4,525,169. Mizoguchi discloses a porous sheet comprising ultra fine fibers having a denier of 0.0005 to 3 denier, (col. 8, lines 44-54), which can be needle-punched, (col. 9, line 32), which is impregnated with a polyurethane binder. The polyurethane binder comprises a mixture of polycarbonate and polyester diols as the soft segment of the binder and a hard segment formed from an aromatic diisocyanate and ethylene glycol. Suitable components for the polycarbonate and polyester diols include those claimed. See col. 3, line 64 – col. 4, line 44. The isocyanate groups can be selected from the claimed groups. See col. 6, lines 58 – col. 7, line 11 With regard to the ratio of polycarbonate polyol and polyester

polyol, since Mizoguchi teaches combining the polyols to form a polyurethane which had the most desirable characteristics of each, (see background of invention as well as col. 3, lines 44-62), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the ratio of the components through the process of routine experimentation in order to arrive at a polyurethane having the desired strength, elasticity, durability, etc. Mizoguchi differs from the claimed invention because Mizoguchi does not teach that the ureic groups are derived from the reaction between the isocyanate groups and water but teaches employing ethylene glycol, or 1,4 butane diol. Traubel teaches that in forming porous polyurethane sheets which may be used as binders for textiles, (see col. 9, lines 56-58), that in addition to ethylene glycol and 1,4, butane diol that water may be used as the chain extending agent, (see col. 4, lines 37 – col. 5, line 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed water instead of either ethylene glycol or 1,4 butane diol, motivated by the teaching of Traubel that water was an art recognized equivalent chain extending agent. Mizoguchi differs from the claimed invention because Mizoguchi does not disclose employing fibers having different dyeability in the nonwoven fabric. Higuchi et al teaches an artificial leather material comprising ultra fine fibers having a denier of between 0.0001 and 0.7. The fibers can be needled to form a fabric. See col. 3, lines 6-9. Higuchi et al teaches employing two different types of fibers having two different degrees of dyeability to make up the nonwoven. See col. 3, lines 23-38. Higuchi teaches that by using two different fibers having different dyeability that a mixed color effect can be obtained. Higuchi further

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teaches that the fabric can further be printed with various dyes and pigments to further enhance the appearance of the fabric. See col. 6, lines 19-46. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed fibers having different degrees of dyeability to form the fabric substrate in Mizoguchi and to have further printed the dyed fabric, motivated by the teaching of Higuchi that this allows for the formation of fabrics having an enhanced appearance. With regard to the limitations regarding when the fibers are dyed and the type of needles employed, since the instant claims are drawn to a product, the burden is on Applicant to show that any process differences result in an unobvious difference in the claimed product.

- 4. Applicant's arguments filed 2/27/06 have been fully considered but they are not persuasive. With regard to Belluci, the instant application has a filing date of 12/19/2003. Belluci has a publication date of 8/14/03. Therefore Belluci qualifies as prior art under section 102(a) and therefore the rejection is maintained since 103(c) does not apply to references which are also prior art under 102(a)
- 5. With regard to the rejection of Mizoguchi in view of Higuchi, the arguments are moot in view of the new grounds of rejection.
- 6. Applicant's amendments have overcome the 112 rejections.
- 7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

Elizabeth M. Cole Primary Examiner

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